

Sohigh BAT-300AH-OPzV

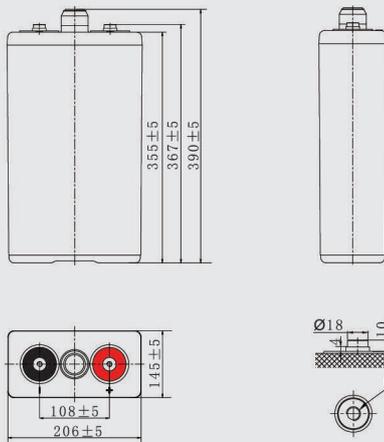
Solar OPzV Battery



Specifications

Rated Voltage	2V	
Nominal Capacity	300Ah	(C ₁₀ , 1.80V/cell)
Dimension	Length	145±5mm(5.71 in.)
	Width	206±5mm(8.11 in.)
	Container Height	355±5mm(13.97 in.)
	Total Height	390±5mm(15.35 in.)
Terminal	M8	
Container Material	ABS	
Rated Capacity (25°C)	390.0 Ah	(100hr, 3.90A, 1.80V/cell)
	300.0 Ah	(10hr, 30.0A, 1.80V/cell)
	263.0Ah	(5hr, 52.6A, 1.75V/cell)
	233.7Ah	(3hr, 77.9A, 1.75V/cell)
	168.0 Ah	(1hr, 168.0A, 1.65V/cell)
Max. Discharge Current (5s)	2400A	
Internal Resistance(25°C)	Approx. 1.00mΩ	
Operating Temp. Range	Discharge	-20°C~55°C (-4°F~131°F)
	Charge	0°C~40°C (32°F~104°F)
	Storage	-20°C~50°C (-4°F~122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max. Charging Current(25°C)	75.0A	
Charge voltage(25°C)	Float	2.25V
	Temp. Coefficient	-3mV/cell/°C
	Cycle(Equalization)	2.35~2.40V
Effect of temp. to Capacity	40°C (104°F)	106%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤ 3% per month at 25°C	

Dimensions (mm)



Solar & Wind applications parameters settings

Over voltage disconnect	2.45±0.01V/cell @ 20~25°C
Regulation/equalize voltage	2.40±0.01V/cell @ 20~25°C
Array reconnection voltage	2.25±0.005V/cell @ 20~25°C
Float voltage setting	2.27±0.005V/cell @ 20~25°C
Low voltage alarm voltage	1.95±0.005V/cell @ 20~25°C
Low voltage disconnect	1.90±0.005V/cell @ 20~25°C
Load reconnect voltage	2.09±0.01V/cell @ 20~25°C
Temp. compensate coefficient	-5mV/cell/°C

Solar OPzV Battery

2V Voltage

300AH Capacity

Tubular Gel

20+ Years Design Life

Constant Current Discharge (Amperes) at 25°C (77°F)

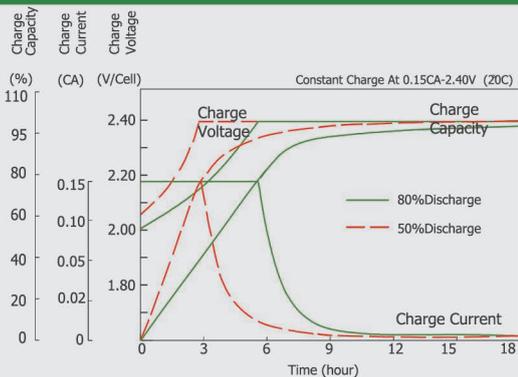
F. V/Time	1h	2h	3h	5h	8h	10h	24h	48h	72h	100h	120h
1.85V/cell	134.1	90.7	69.6	47.6	33.4	28.1	13.4	6.98	5.02	3.80	3.28
1.80V/cell	150.3	99.3	75.7	51.3	35.7	30.0	13.8	7.25	5.21	3.90	3.38
1.75V/cell	156.3	102.8	77.4	52.3	36.3	30.5	13.9	7.41	5.34	3.98	3.43
1.70V/cell	163.1	105.3	79.0	53.1	36.8	30.9	14.1	7.56	5.39	4.04	3.47
1.67V/cell	167.4	107.1	80.4	54.0	37.3	31.1	14.3	7.64	5.44	4.10	3.52
1.60V/cell	169.9	108.8	81.4	54.5	37.5	31.4	14.4	7.72	5.48	4.15	3.56

Constant Power Discharge (Watts/cell) at 25°C (77°F)

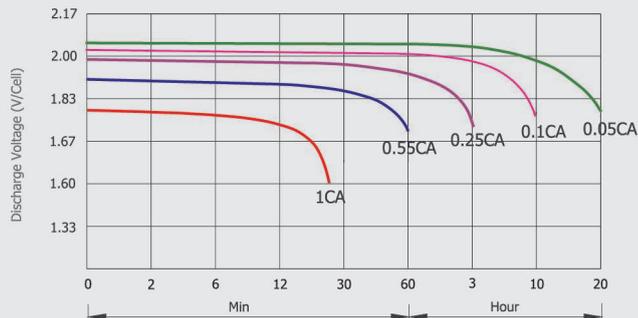
F. V/Time	1h	2h	3h	5h	8h	10h	24h	48h	72h	100h	120h
1.85V/cell	258.8	176.1	135.8	93.5	66.1	55.9	26.7	14.0	10.1	7.65	6.61
1.80V/cell	289.5	192.6	146.9	100.4	70.7	59.6	27.6	14.5	10.4	7.83	6.79
1.75V/cell	298.9	196.9	149.5	102.1	71.7	60.4	27.7	14.8	10.7	7.98	6.88
1.70V/cell	309.1	201.2	152.1	103.8	72.5	61.0	28.1	15.1	10.8	8.09	6.97
1.67V/cell	315.1	204.6	154.7	104.7	73.2	61.5	28.4	15.2	10.9	8.22	7.05
1.60V/cell	318.5	206.4	155.5	105.5	73.6	61.9	28.6	15.4	10.9	8.29	7.12

NOTICE: Manual measurement, product specifications and dimensions may have errors, subject to actual receipt.

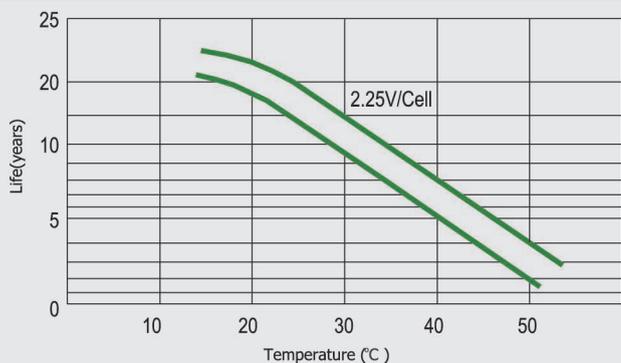
Discharge Characteristics



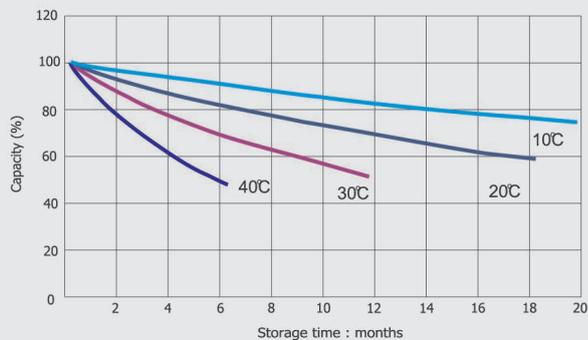
Charging Characteristics



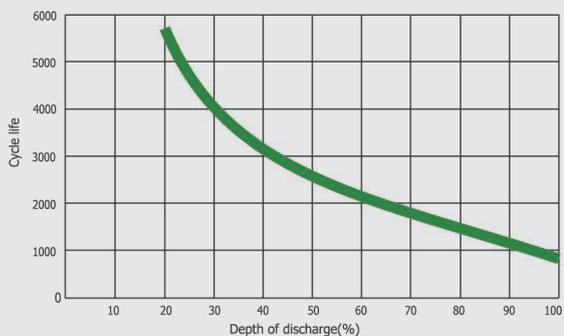
Temperature vs Float Life



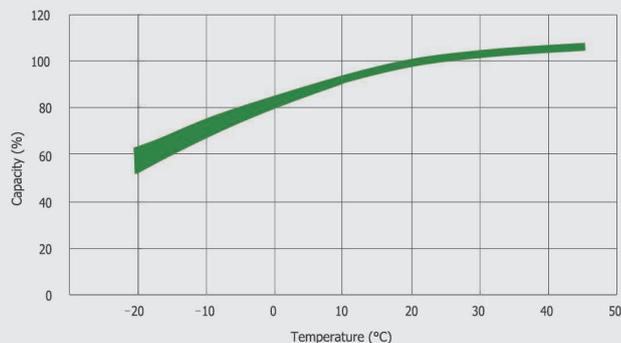
Self Discharge Characteristics



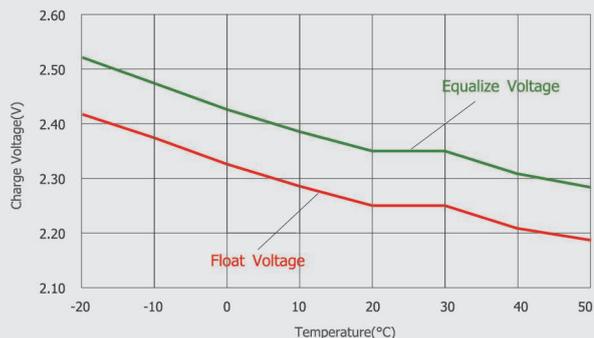
Cycle Life vs Depth of Discharge



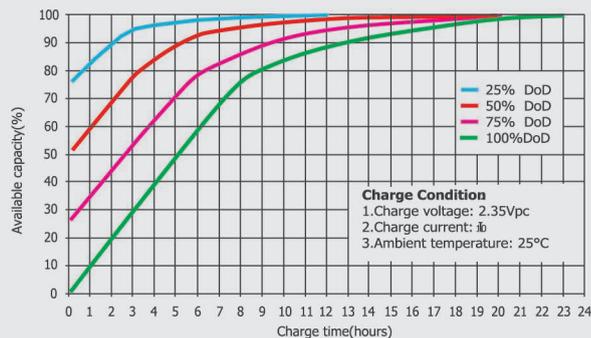
Capacity vs Temperature



Charge Voltage Capacity vs Temperature



Charge Capacity vs Time



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